

Listing of Claims

Please add new claims 70-73, and
cancel claims 13-36 and 47-69 as follows:

1. (previously presented) A method of treating a disease which is associated with an excess transport of hyaluronan across a lipid bilayer, comprising:

administering a pharmaceutical composition comprising at least one inhibitor of at least one ABC transporter capable of transporting hyaluronan across a lipid bilayer.
2. (previously presented) The method of claim 1, wherein said inhibitor specifically reduces the transport of hyaluronan across a lipid bilayer mediated by at least one of said ABC-transporter.
3. (previously presented) The method of claim 1, wherein said ABC-transporter is a mammalian ABC-transporter.
4. (previously presented) The method of claim 1, wherein said ABC-transporter is a human ABC-transporter.
5. (previously presented) The method of claim 1, wherein said human ABC-transporter is a member of the subfamily selected from the group consisting of the human ABCB (MDR)-subfamily, the ABCA subfamily and the human ABC-C (MRP)-subfamily.
6. (previously presented) The method of claim 1, wherein said ABC-transporter is comprised in a chondrocyte cell.
7. (previously presented) The method of claim 1, wherein said inhibitor is selected from the group consisting of:
 - (a) an inhibitor of a member of the ABCB (MDR)-subfamily selected from Verapamil, Valspodar (PSC833), Elacridar (GF-120918), Bericodar (VX-710), Tariquidar (XR-9576), XR-9051, S-9788, LY-335979, MS 209, R101933; OC-144-093; Quinidine, Chloripramine, Nicardipine, Nifedipine, Amlodipine, Felodipine, Manidipine,

Flunarizine, Nimodipine, Pimozide, Lomerizine, Bepridil, Amiloride, Almitrine, Amiodarone, Imipramine, Clomiphene, Tamoxifen, Toremifene, Ketocanazole, Terfenadine, Chloroquine, Mepacrin, Diltiazem, Niguldipine, Prenylamine, Gallopamil, Tiapamil, Dex-Verapamil, Dipyridamole, Pimozide, Haloperidol, Chlorpromazine, Trifluoperazine, Fluphenazine, Reserpine, Clopenthixol, Flupentixol, N-acetyldaunorubicin, Vindoline, N2762-14, N276-14, N276-17, B9309-068, BIBW-22, Carvedilol, Clofazimine, Ketoconazole, Lovastatin, N-Norgallopamil, Simvastatin, Troleandomycin, Vinblastin, Itraconazole, Econazole, Oligomycin, Cyclosporin and Rapamycin; and

(b) an inhibitor of a member of the ABCA subfamily selected from Glyburide, DIDS (4,4-diisothiocyanostilbene-2,2-disulfonic acid), Bumetanide, Furosemide, Sulfobromophthalein, Diphenylamine-2-carboxylic acid and Flufenamic acid; and

(c) an inhibitor of a member of the human ABC-C (MRP)-subfamily selected from MK-571, Benzbromaron, PAK-104P, Probenecid, Sulfinpyrazone, Indomethacin, Merthiolate and Ethacrynic acid; and

(d) antibody or functional fragments thereof which is specifically recognizing one or more ABC-transporter capable of transporting hyaluronan across a lipid bilayer; and

(e) antisense oligomer, siRNA and/or miRNA directed against one or more ABC-transporter capable of transporting hyaluronan across a lipid bilayer; and

(f) aptamer directed against one or more ABC-transporter capable of transporting hyaluronan across a lipid bilayer.

8. (previously presented) The method of claim 1, wherein said disease which is associated with an excess transport of hyaluronan across a lipid bilayer is arthritis.

9. (previously presented) The method of claim 8, wherein said arthritis is characterized by at least one of a degeneration and a destruction of cartilage.

10. (previously presented) The method of claim 8, wherein said arthritis is selected from the group consisting of osteoarthritis, (juvenile) chronic arthritis, rheumatoid arthritis, psoriatic arthritis, *A. mutilans*, septic arthritis, infectious arthritis and reactive arthritis.

11. (previously presented) The method of claim 1, wherein said inhibitor is administered prophylactically.

12. (previously presented) The method of claim 1, wherein said inhibitor is administered therapeutically.

13-36. (cancelled)

37. (previously presented) A method of preventing, ameliorating and/or treating the symptoms of a disease which is associated with an excess transport of hyaluronan across a lipid bilayer, e.g. arthritis in a subject comprising administering at least one inhibitor of at least one ABC-transporter capable of transporting hyaluronan across a lipid bilayer to the subject, preferably an mammalian subject, such that the a disease which is associated with an excess transport of hyaluronan across a lipid bilayer.

38. (previously presented) The method of claim 37, wherein said arthritis is characterized by at least one of degeneration and a destruction of cartilage.

39. (previously presented) The method of claim 37, wherein said arthritis is selected from the group consisting of osteoarthritis, (juvenile) chronic arthritis, rheumatoid arthritis, psoriatic arthritis, *A. mucilans*, septic arthritis, infectious arthritis and reactive arthritis.

40. (original) The method of claim 39 wherein said arthritis is osteoarthritis.

41. (previously presented) The method of claim 37, wherein said mammalian subject is selected from the group consisting of a human, a horse, a camel, a dog, a cat, a pig, a cow and a goat.

42. (previously presented) The method of claim 1, wherein said ABC-transporter is

selected from the group consisting of MRP5 (ABCC5), ABCC11 and ABCC12.

43. (previously presented) A method of treating osteoarthritis comprising administering a pharmaceutical composition comprising at least one ABC-transporter capable of transporting hyaluronan across a lipid-bilayer, wherein said at least one ABC-transporter is selected from the group consisting of MRP5 (ABCC5), ABCC11 and ABCC12.

44. (previously presented) The method of claim 43, wherein said at least one ABC-transporter is MRP5 (ABCC5).

45. (previously presented) A method of treating arthritis comprising administering a Pharmaceutical composition comprising Zaprinast®.

46. (previously presented) A method of treating osteoarthritis comprising administering a pharmaceutical composition comprising Elacridar (GF-120918), Valspodar (PSC-833), Bericodar (VX-710), Tariquidar (XR-9576), S-9788, Ly-335979, OC-144-093 or Lysodren®.

47-69. (cancelled)

70. (new) The method of claim 1, wherein said human ABC-transporter is a member of the human ABC-C (MRP)-subfamily.

71. (new) The method of claim 1, wherein said inhibitor is Probenecid.

72. (new) The method of claim 10, wherein said arthritis is osteoarthritis.

73. (new) The method of claim 37, wherein said inhibitor is Probenecid.